



## Biodiesel

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- **National Program**

- Biodiesel Handling and Use Guidelines
- Fuel quality testing and support
- B20+ locations



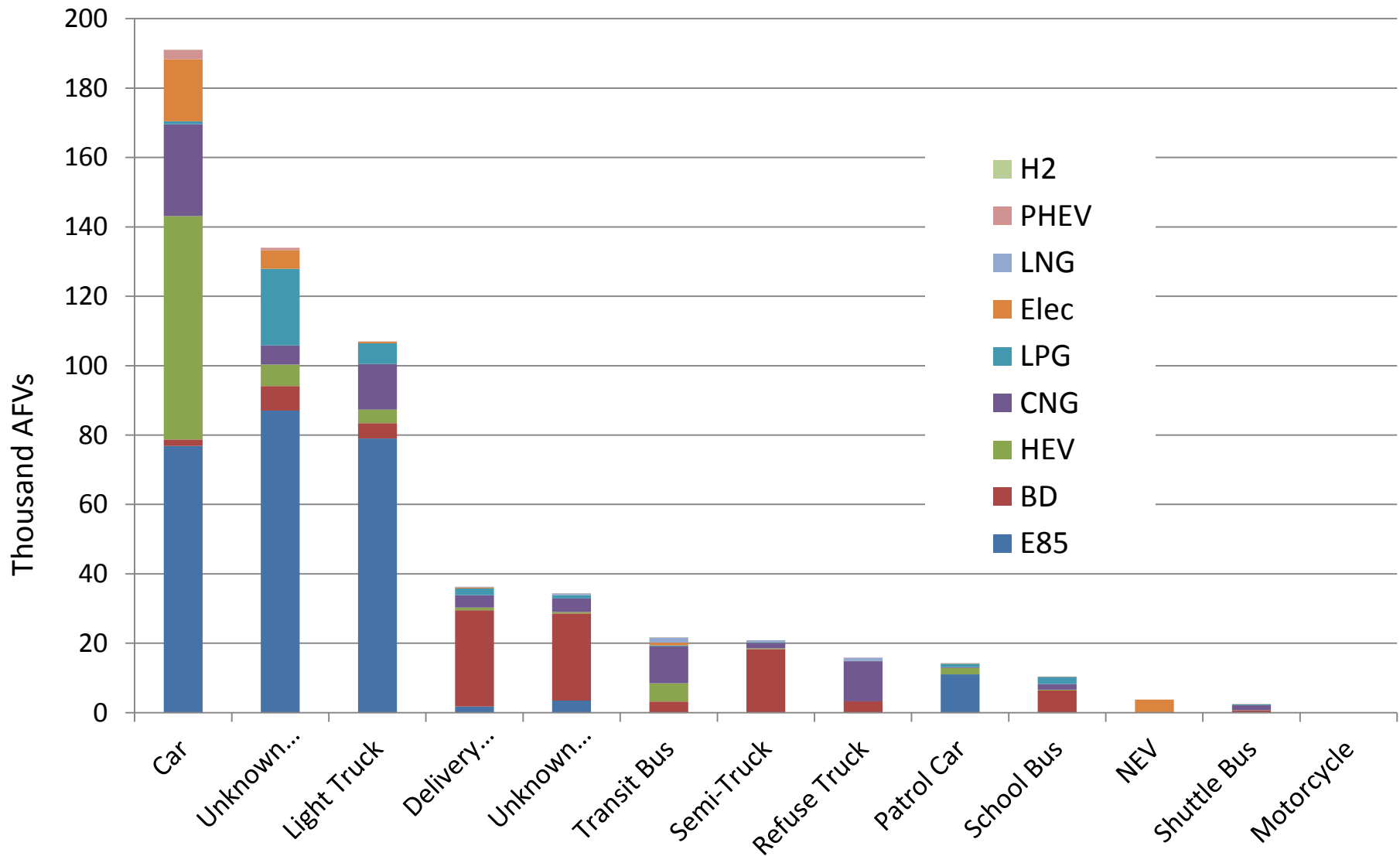
- **Coalitions**

- Fenton, MO students are learning to produce, test and use biodiesel as part of school curriculum
- Hoover, AR uses commercial B20 in city fleet, and produces BD from a program to collect waste cooking oil
- Lambert airport in St. Louis uses B20 in over 400 ground support vehicles

- **Vehicles:** 13M diesel vehicles
  - Split roughly equally between LDV (class 1-3) HDV (class 4-8)
  - Light duty growing in models and vehicles in operation
- **Stations:** 775 selling B20+
  - 285 public stations, the rest are private
  - Many more offering blends up to B5
- **Niches Today:**
  - Government & utility fleets
  - Private fleets
  - Agricultural applications
  - School buses



# What Vehicles are Using Biodiesel?



# Overview of Niche Market Findings



Niche Market	Technologies/Potential Vehicles	Petroleum Saving Potential (10 <sup>6</sup> GGE/y)
School Buses	MD/HD - 675,000 buses	1B gallons diesel
Work Trucks Class 4-8  Includes drayage vehicles	MD/HD – 6.9 million diesel vehicles	Class 4 27% Class 5-6 75% Class 7-8 95%



## Niche Stats

- 675,000 school buses nationwide
- 1B gallons of conventional fuel used each year



## Opportunities

- Low cost to implement for fleets
- Easy entry with low level blends
- Many school districts have green transportation policies in place

## Niche Stats

- Large percentage of individually owned vehicles
- Mostly Class 7 & 8 trucks
- 50% are more than 15 years old

## Opportunities

- Relatively low cost and simple for ports to implement
- Many ports have air quality requirements that may be met with using biodiesel



## Niche Stats

- 6.9 million Class 4-8 trucks on the road nationwide
  - Class 4 – 27% use diesel
  - Class 5-6 – 75% use diesel
  - Class 7-8 – 95% use diesel

## Opportunities

- Biodiesel can work well with broad array of diesel vehicles within one fleet.

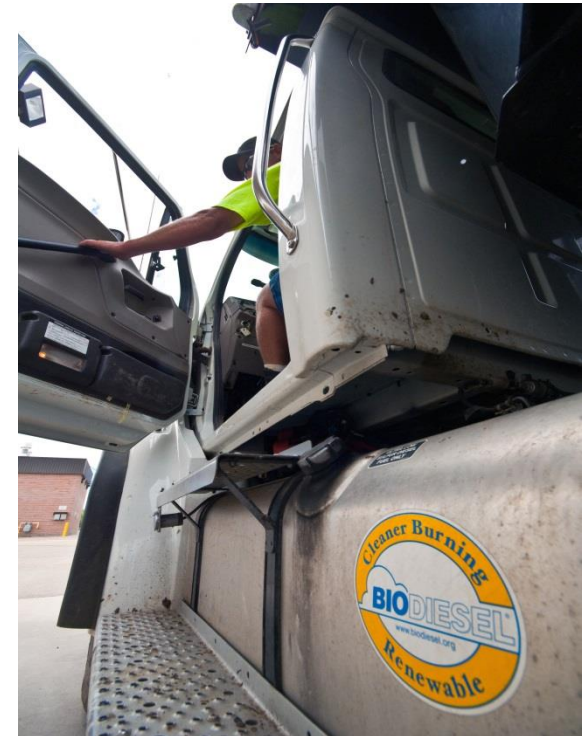




# Overarching Clean Cities Strategies for Biodiesel



- National Clean Cities Program
  - Information and training designed for fleet operators
    - Fuel supply, vehicle maintenance, BQ9000 and fuel quality/handling
  - Success Stories and Toolkits for key niche markets
  - Analysis to understand opportunities for retail market
- Key Partnerships
  - Work truck segment
  - School bus associations
  - Ports
- Local Coalitions
  - Understand what fleets have had success nationally and use that information locally
  - Understand and promote local availability



- Size of US diesel fleet continues to grow across so the potential for biodiesel use is growing.
- Low cost and ease of entry is an advantage for biodiesel
- Assuring fuel quality is essential, especially guidance for new users
- Documenting biodiesel successes within niches is important to growth.
  - Connecting new users with information and others who have had success
- Increasing the retail presence to serve growing LD population is important.

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